

## Amendments to the Specification

Please replace paragraph [0005] with the following:

**[0005]** Figure 1 illustrates a block diagram of a prior art DES implementation 100. As illustrated in Figure 1, at 105 an input comprising a 64-bit block of data is subject to an IP, to form a permuted input block. The permuted input block 110 is split into a left data block  $L_{i-4}$  120 and a right data block  $R_{i-4}$  115. Each block  $L_{i-4}$  and  $R_{i-4}$  comprises 32 data bits. Figure 1 illustrates 4 DES iterations (181-184) of the 16 DES iterations specified in (FIPS) publication 46-2.

Please replace paragraph [0043] with the following:

**[0043]** In general, the computer systems illustrated by Figure 3 includes a processing unit 302 coupled through a bus 301 to a system memory 313. System memory 313 comprises a read only memory (ROM) 304, and a random access memory (RAM) 303. ROM 304 comprises Basic Input Output System (BIOS) 316, and RAM 303 comprises operating system 318[[303]], application programs 320, agent 322, and program data 324.

Please replace paragraph [0045] with the following:

**[0045]** In one embodiment, the processing unit 302 communicates with co-processor 309[[303]] and sends co-processor 309[[303]] one or more commands to compute an encryption / decryption of a data block. Co-processor 309[[303]] encrypts and / or decrypts the data block in accordance with the flow diagram illustrated in Figure 2, and provides processing unit 302 with the result of the encryption / decryption. In one embodiment, co-processor 309[[303]] comprises one or more execution units (not shown), wherein each execution unit performs the functions illustrated in Figure 2.

Please replace paragraph [0046] with the following:

**[0046]** Display device 305 provides graphical output for computer system 300. Input devices 306 such as a keyboard or mouse are coupled to bus 301 for communicating information and command selections to processor 302. Also coupled to processor 302 through bus 301 are one or more network devices 308 that can be used to control and transfer data to electronic devices (printers, other computers, etc.) connected to computer 300. Network device 308 connects computer system 300 to a network 314, and may include Ethernet devices, phone jacks and satellite links. This network 314 can connect computer 300 to another computer 312.